

selected to synergistically inhibit proliferation of the microbial population of the skin injury or the surface lesion of the human or animal patient.

2. The method of Claim 1, further comprising the steps of:

- (a) identifying the microbial population;
- (b) identifying an antibiotic capable of inhibiting proliferation of the microbial population;
- (c) determining the minimal inhibitory concentration (MIC) and the fractional inhibitory concentration (FIC) values for the antibiotic and the chelating agent; and
- (d) selecting concentrations of the antibiotic and the chelating agent of the antimicrobial composition to synergistically inhibit proliferation of the microbial population.

Please enter new Claims 54 and 55 as follows:

54. (New) The method of Claim 1, wherein the antimicrobial composition consists essentially of the pharmaceutically acceptable antimicrobial agent, the pharmaceutically acceptable chelating agent, the pharmaceutically acceptable pH buffering agent, and the pharmaceutically acceptable carrier.

55. (New) A method of inhibiting proliferation of a microbial population of a skin injury or surface lesion of a human or animal patient, the method comprising contacting the skin injury or the surface lesion with an antimicrobial composition, wherein the antimicrobial composition consists essentially of a pharmaceutically acceptable antimicrobial agent, a pharmaceutically acceptable chelating agent, a pharmaceutically acceptable pH buffering agent, vitamin E and a pharmaceutically acceptable carrier, and wherein the concentrations of the chelating agent and the antimicrobial agent are selected to synergistically inhibit proliferation of the microbial population of the skin injury or the surface lesion of the human or animal patient.